

importance to separate *Opisthosiphon* from *Rhytidopoma*, would also have the same consideration in separating *C. uncinatum* from *Choanopoma*.

It would also seem that if the breathing tube restricted for *Opisthosiphon* is of generic importance that the modified perforation seen in so many of the *Ericiidae* from western Cuba should also be considered of value generically. This would mean, providing that the operculum was still considered of generic value, the removal of species of *Choanopoma*, of *Cistula* and of a large number of *Chondropoma* to new genera.

This would merely be substituting chaos for confusion and, until the anatomy of many of the species has been carefully examined, it would seem better to merely call attention to the peculiarly restricted distribution of those species of the *Ericiidae*, which have made structural changes in the shell, probably, as Dr. Dall suggests (*Proc. Mal. Soc. Lond.*, 1905, p. 309) to enable them to obtain air when the aperture is closed by the operculum.

SOME MARINE MOLLUSCA ABOUT NEW YORK CITY.

BY ARTHUR JACOT.

To aid any New-Yorkers interested in the shells of their vicinity, I am taking this opportunity of giving them the results of a few studies which were made during the past year in that region.

The coast of Staten Island from Fort Wadsworth to Great Kills was carefully gone over at low tide several times. Along this strip are three definite stations. The first (1) is an expanse of red sand flats (exposed only at low tide) at the mouth of the stream which drains the marshland between South and Midland Beaches. This is the only place where I found *Periploma leanum*, *Pandora gouldiana* and *Lyonsia hyalina*. Another station (2) opposite the Oakwood Heights station on the steam railroad to Totenville, is a "sod-bank" formation, beautifully showing the encroachment of the sea on

the land. The "banks" wherever submerged, are covered with *Modiolus plicatulus* among which and over which crawl *Littorina littorea* and *L. rudis*. The third station (3) is inside the isthmus which encloses the bay near the second station. Here there is an eel-grass bed which is exposed at low water.

The only species of note at Rockaway Beach (4) is *Astarte castanea* which can be picked up in front of or a little beyond the hospital to the west of the pleasure beach. Far Rockaway Beach (5) yielded the greatest number of species. This is especially due to the rift of fine shell material left by the receding tide at the angles of the bar which begins to the west of the "bathing beach."

The numbers in the following list correspond to the stations as designated above.

Pelecypoda.

- Nucula proxima truncula* Dall. A valve at 5.
Yoldia sp? Fragment at 5.
Arca campechiensis pexata Say. Generally distributed.
Arca transversa Say. Less common than preceding.
Ostrea virginica Gmelin. Generally distributed.
Pecten gibbus borealis Say. Most common at 4 and 5.
Anomia simplex d'Orbigny. Generally distributed.
Mytilus edulis Linnaeus. Generally distributed.
Mytilus edulis pellucidus Pennant. Not as common as on Conn. coast.
Modiolus demissus plicatulus (Lam.). Local. Abundant where found.
Periploma leanum (Conrad). Rare and only at 1.
Pandora gouldiana Dall. One valve at 1.
Lyonsia hyalina (Conrad). Only at 1.
Astarte castanea (Say). At 4, very small specimens at 5.
Venericardia borealis (Conrad). Only at 5.
Divaricella quadrisulcata (d'Orbigny). Occasional at 4 and 5.
Rochefortia planulata (Stimpson). Occasional at 5.
Aligena elevata (Stimpson). Not as common as preceding.
Cardium pinnulatum Conrad. One valve at 5.

Callocardia morrhuana (Linsley). At 1 and 5.

Venus mercenaria Linnaeus. Becoming less common.

Venus mercenaria notata Say. True form very rare.

Gemma gemma (Totten). Generally distributed.

Gemma gemma purpurea (H. C. Lea). Different habitat than preceding.

Petricola pholadiformis Lamarek. Generally distributed.

Tellina tenera Say. Fine specimens at 1.

Tellina tenella (Verrill). One valve at 1.

Tellina versicolor De Kay. Fine specimens at 5.

Macoma balthica (Linnaeus). Commonest at 2.

Tagelus gibbus (Spengler). At 5.

Ensis directus (Conrad). Generally distributed.

Siliqua costata (Say). Found only at 5.

Spisula solidissima (Dillwyn). Very abundant at 4.

Spisula solidissima similis (Say). Occasional.

Mulinia lateralis (Say). Generally distributed.

Mya arenaria Linnaeus. Generally distributed.

Corbula contracta Say. Found only at 5.

Barnea truncata (Say). At 1, 3 & 5, but especially common at 3.

Zirfaea criyata (Linnaeus). One valve at 5.

Teredo navalis Linnaeus. At 5.

Gasteropoda.

Dentalium sp? Fragment at 5.

Pyramidella fusca (C. B. Adams). Several specimens at 5.

Pyramidella winkleyi Bartsch? Two or three specimens which seem to be this species.

Turbonilla nivea (Stimpson). Only at 5, where it is the commonest *Turbonilla*.

Turbonilla aequalis (Say). I have referred 7 of my specimens to this species.

Turbonilla vinea Bartsch. Two specimens from 5.

Turbonilla areolata Verrill. One specimen, but with six rather than five spiral rows of pits, from 5.

Turbonilla interrupta (Totten). This is the typical form, not as described by Bartsch, but as described by Bush. The

color band is well marked in all my specimens (six). Found only at 5.

Odostomia (Chrysallida) sp? Two specimens at 5.

Odostomia impressa (Say). Several specimens at 5.

Odostomia trifida (Totten). Abundant at 5, found also at 3.

Odostomia bisuturalis Say. At 3 and 5.

Epitoneum multistriatum (Say). Three specimens at 5.

Polinices duplicata (Say). Generally distributed, fine specimens at 4.

Polinices heros (Say). Generally distributed, fine specimens at 4.

Polinices triseriata (Say). Occasional.

Crepidula fornicata (Linnaeus). Generally distributed.

Crepidula glauca Say. Found only at 2.

Crepidula glauca convexa Say. Generally but thinly distributed.

Crepidula plana Say. Generally distributed.

Paludestrina minuta (Totten). Occasional at 5.

Paludestrina laevis (De Kay). Common at 5, a few at 3.

Adeorbis supranitidus lirata (Verrill). Several specimens at 5, all being of this subspecies.

Litorina littorea (Linnaeus). At 2, 3 and 4.

Litorina obtusata palliata (Say). Only found at 5.

Litorina rudis (Donovan). Abundant at 2.

Lacuna vincta (fusca) Gould. Found at 2, 3 & 5.

Triphoris perversa nigrocincta (C. B. Adams). Several specimens at 5.

Certhiopsis greenii (C. B. Adams). Several specimens at 5.

Bittium alternatum (Say). Fine specimens at 5.

Eupleura caudata (Say). Generally distributed.

Urosalpinx cinerea (Say). Generally distributed.

Columbella avara similis Ravenel. A specimen at 2.

Columbella lunata (Say). Generally distributed.

Alectrion obsoleta (Say). Generally distributed.

Alectrion trivittata (Say). Generally distributed.

Busycon canaliculata (Linnaeus). Generally distributed.

Actaeon punctostriatus (C. B. Adams). Several specimens at 5.

Tornatina canaliculata (Say). Fairly common at 5.

Cylichna oryza (Totten). Several specimens at 5.

Melampus lincatus Say. Most common at 2.

Alexia myosotis (Drap.) Fairly common at 3.

On a tramp up and down the western end of Long Beach point, Long Island, I picked up the following interesting forms, besides forty-eight of the commoner species:

Yoldia limatula (Say). 1 valve.

Arca ponderosa Say. 3 valves.

Astarte castanea (Say). Common.

Tellina tenella (Verrill). 1 valve.

Tellina versicolor De Kay. 2 valves.

Barnea costata (Linné). 1 valve (fragment).

Cavolina telemus (Linné). 1 specimen.

DESCRIPTION OF A NEW SPECIES AND VARIETY OF PLANORBIS
FROM POST-GLACIAL DEPOSITS.*

BY FRANK C. BAKER.

Planorbis parvus urbanensis n. var. Pl. VII, figs. 4-6.

Shell differing from *parvus* by having a round aperture, the last third of the body whorl being depressed below the general level of the spire, deeper sutures, channelled in most individuals, and a deeper umbilical region. The body whorl has not quite as great transverse diameter as in typical *parvus*. In *parvus* (pl. 1, figs. 1-3), the whorls are typically in the same plane, the aperture is oblong or long ovate and the sutures are impressed but not channelled. The umbilical region is also less impressed and has a "reamed out" appearance.

Height at aperture, 1.00; greatest diameter, 3.00 mm.
Holotype.

Height at aperture, 1.00; greatest diameter, 3.00 mm.

* Contribution from the Museum of Natural History, University of Illinois, No. 1.